



Serial No. 10/731,878

REMARKS

The Office Action of May 17, 2005, has been received and reviewed.

Claims 1-20 are currently pending and under consideration in the above-referenced application, each standing rejected.

New claims 21-23 have been added.

Reconsideration of the above-referenced application is respectfully requested.

35 U.S.C. § 112, Second Paragraph, Rejections

Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, for reciting subject matter which is purportedly indefinite.

Use of the term "substantially" and the phrase "an appropriate switching motion" in independent claims 1 and 10 have been objected to.

The relative term "substantially" is definite when one of ordinary skill in the art would recognize the meaning thereof. M.P.E.P. § 2173.05(d). The term "substantially" is used in independent claims 1 and 10 to modify the term "linear" in regards to a switching motion. One of ordinary skill in the art would readily understand that, since an individual's hand is often used to turn a switch on or off and, thus, to effect a switching motion, the switching motion may not be exactly linear, but may take a somewhat arcuate path, or even an irregular path. Thus, one of ordinary skill in the art would understand that use of the term "substantially" allows for some variation from linear when a switching motion is effected.

The scope of the phrase "an appropriate switching motion" would also be readily understood by one of ordinary skill in the art. This is because the phrase readily evokes the type of motion that is typically required to change a state of (*e.g.*, turn on or off) a conventional wall switch.

Accordingly, it is respectfully submitted that independent claims 1 and 10 and, thus, claims 2-9 and 11-14 depending respectively therefrom, are in condition for allowance under the second paragraph of 35 U.S.C. § 112.

Claim 5 has also been rejected on the basis that "it is unclear whether the limitations following the phrase ['the appropriate switching motion'] are part of the claimed invention."

The limitations that follow the phrase deal with the detection distance of a motion detection element; thus, one of ordinary skill in the art would readily understand that these limitations clearly pertain to the motion detection element of the claimed electrical switch, not to a switching motion.

Independent claim 15 has been rejected because the Office does not understand how “timing the switching motion” could be performed. From reading the specification of the above-referenced application one of ordinary skill in the art would have a ready understand of an example of how to time a switching motion, as well as a variety of alternative techniques and equivalents thereto. Thus, the phrase “timing the switching motion” meets the definiteness requirement of 35 U.S.C. § 112, second paragraph.

It has also been asserted that that recitation “is effected in a direction that corresponds to a change in the state of the electrical circuit” in independent claim 15 is indefinite. This language, too, would be sufficiently definite to comply with the requirements of the second paragraph of 35 U.S.C. § 112, second paragraph. Using a conventional wall switch as a nonlimiting example, when the switch is in an “up” position, the associated electrical circuit is often “on,” while the electrical circuit is often “off” when the switch is in a “down” position. Thus, continuing with the nonlimiting example, a switching motion effected in an upward direction may turn an electrical circuit “on,” while a switching motion that is effected in a downward direction may turn an electrical circuit “off.”

Therefore, independent claim 15 and claims 16-20 depending therefrom comply with the definiteness requirement of 35 U.S.C. § 112, second paragraph.

As the phrase “the switching motion is effected” does not appear in claim 17, the additional rejection of claim 17 makes no sense.

It is respectfully submitted that each of claims 1-20 is in condition for allowance under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 102

Claims 1-4 and 6-8 have been rejected under 35 U.S.C. § 102(b) for being drawn to subject matter that is allegedly anticipated by the subject matter described in U.S. Patent 4,305,006 to Walthall et al. (hereinafter “Walthall”).

Walthall describes an optical electrical switch that includes two sensors. Fig. 5 is a schematic of one embodiment of that switch. In that embodiment, an upper sensor D1, Q2 is responsible for opening and closing the circuit, or turning it “on” and “off,” while the other sensor D7, Q8 is responsible for tailoring the amount of power transmitted through the circuit (*e.g.*, dimming). It is readily apparent that the two sensors of that switch do not interact with an element (*e.g.*, a timer) that would enable the switch to detect a switching motion. Rather, the sensors operate independently from one another; each merely detecting the presence of an object, such as a hand, in proximity thereto; not a particular motion by the object.

A “counter” 211 is associated with one of the sensors of the switch of Walthall, but that “counter” 211 merely determines the amount of time that an object is positioned over its corresponding sensor to determine how much the amount of power that passes through the circuit should be increased or reduced (*e.g.*, dimmed).

Further, by stating that merely “passing one’s hand (or other object) . . . directly in front of emitter D1 and detector Q2 . . . activates the on-of circuitry . . . to turn the light on” and that “[a] second pass of the hand turns the light off,” at col. 3, lines 16-26, Walthall clearly indicates that the mere placement of an object in front of emitter D1 and detector Q2, rather than a switching motion, turns the light on or off. Although Walthall, at col. 12, lines 21-66, discusses upward and downward motion, it is evident that the upward or downward motion is not required to turn the light of Walthall on or off (*see* col. 12, lines 24-28) that discussion has been provided merely to explain that a dimming function may be effected either before or after a light is turned on.

Independent claim 1 is drawn to switch that includes a motion detection element configured to sense an intended, substantially linear switching motion and, upon sensing the switching motion, to switch an electronic switching element between a first state and a second state.

Walthall includes no express or inherent description of a switch that is configured to sense a switching motion, let alone an intended, substantially linear switching motion, before changing a state of an electronic switching element. Thus, Walthall does not anticipate each and every element of independent claim 1. Therefore, under 35 U.S.C. § 102(b), the subject matter recited in independent claim 1 is allowable over the subject matter described in Walthall.

Each of claims 2-4 and 6-8 is allowable, among other reasons, for depending directly or indirectly from claim 1, which is allowable.

Withdrawal of the 35 U.S.C. § 102(b) rejections of claims 1-4 and 6-8 is respectfully solicited.

Rejections Under 35 U.S.C. § 103(a)

Claims 5, 9, 10-13, and 14 are rejected under 35 U.S.C. § 103(a).

The standard for establishing and maintaining a rejection under 35 U.S.C. § 103(a) is set forth in M.P.E.P. § 706.02(j), which provides:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Walthall

Claim 5 stands rejected under 35 U.S.C. § 103(a) for being directed to subject matter that is assertedly obvious over teachings from Walthall.

Claim 5 is allowable, among other reasons, for depending directly from claim 1, which is allowable.

Walthall in View of Lang

Claim 9 has been rejected under 35 U.S.C. § 103(a) for being drawn to subject matter that is purportedly unpatentable over the teachings of Walthall, in view of the subject matter taught in U.S. Patent 5,977,878 to Lang (hereinafter “Lang”).

Claim 9 is allowable, among other reasons, for depending directly from claim 1, which is allowable.

Walthall in View of Endruschat

Claims 10-13 stand rejected under 35 U.S.C. § 103(a) for reciting subject matter which is allegedly unpatentable over the subject matter taught in Walthall, in view of teachings from U.S. Patent 5,594,238 to Endruschat et al. (hereinafter “Endruschat”).

The teachings of Walthall have been summarized above. As noted, Walthall does not teach or suggest a switch that is configured to detect a *switching motion*. Rather, the switch of Walthall changes states when an object is positioned at a particular location in front of the switch.

Endruschat teaches a switch with a processor that determines the amount of time an object is placed in front of a detector to determine whether placement of the object in front of the detector was intended to change a state of the switch or if the object was inadvertently placed in front of the detector. Col. 4, line 65, to col. 5, line 29. Thus, Endruschat merely teaches that the state of a switch may be changed upon placement of an object in front of the switch for less than a predetermined period of time. In fact, Endruschat notes that a “wave” or “sweeping” motion may change the state of the switch. Col. 4, lines 54-58; col. 4, line 67, to col. 5, line 3. Endruschat does not teach or suggest that a *switching motion* may be detected.

Independent claim 10 recites a switch that includes at least one detector and a pair of emitters that are arranged and associated with one another in such a way as to detect a switching motion.

As neither Walthall nor Endruschat teaches or suggests a switch that is configured to detect a *switching motion*, it is respectfully submitted that the teachings of these references do not support a *prima facie* case of obviousness against independent claim 10, or any of

claims 11-13 depending therefrom. As such, under 35 U.S.C. § 103(a), the subject matter recited in claims 10-13 is allowable over the subject matter taught in Walthall and Endruschat, taken either together or separately.

Walthall, Endurschat, and Lang

Claim 14 is rejected under 35 U.S.C. § 103(a) for being directed to subject matter that is purportedly unpatentable over the subject matter taught in Walthall, in view of teachings from Endruschat and, further, in view of the teachings of Lang.

Claim 14 is allowable, among other reasons, for depending directly from claim 10, which is allowable.

Claim Amendments

The claim amendments that have been presented herein are merely intended to improve clarity, and not to address any of the rejections that have been asserted in the outstanding Office Action. Thus, the revisions to the claims should not be construed to limit the scope of equivalents that are available to any of the claims that remain pending in the above-referenced application.

New Claims

New claims 21-23 have been added.

New claims 21-23 depend directly or indirectly from claim 1, and recite subject matter that further distinguishes over the disclosures of the art that has been considered in the above-referenced application.

More specifically, with respect to the subject matter recited in new claim 21, none of Walthall, Lang, or Endruschat discloses a switch with a motion detection element configured that upon sensing a substantially linear switching motion, switches an electronic switching element between a first state and a second state and, upon sensing an opposite substantially linear switching motion, switches the electronic switching element between the second state and the first state.

New claim 22, which depends from new claim 21, is further allowable since none of Walthall, Lang, or Endruschat discloses a switch with a motion detection element that is configured to sense an upward motion to turn an electronic switching element "on" and a downward motion to turn the electronic switching element "off." Instead, the disclosure of Walthall is limited to apparatus that upon sensing an object at a single location, change the state of a switching element from "on" to "off" or from "off" to "on."

New claim 23 is allowable over the subject matter disclosed in Walthall, Lang, and Endruschat since none of these references discloses a switch that includes a motion detection element that is configured to sense "an intended, substantially linear switching motion that substantially emulates movement for changing a state of a conventional toggle light switch."

None of new claims 21-23 introduces new matter into the above-referenced application.

Accordingly, it is respectfully requested that new claims 21-23 be entered and allowed.

CONCLUSION

It is respectfully submitted that each of claims 1-23 is allowable. An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the above-referenced application has been passed for issuance. If any issues preventing allowance of the above-referenced application remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,



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